

A New Concept for Army Force Projection

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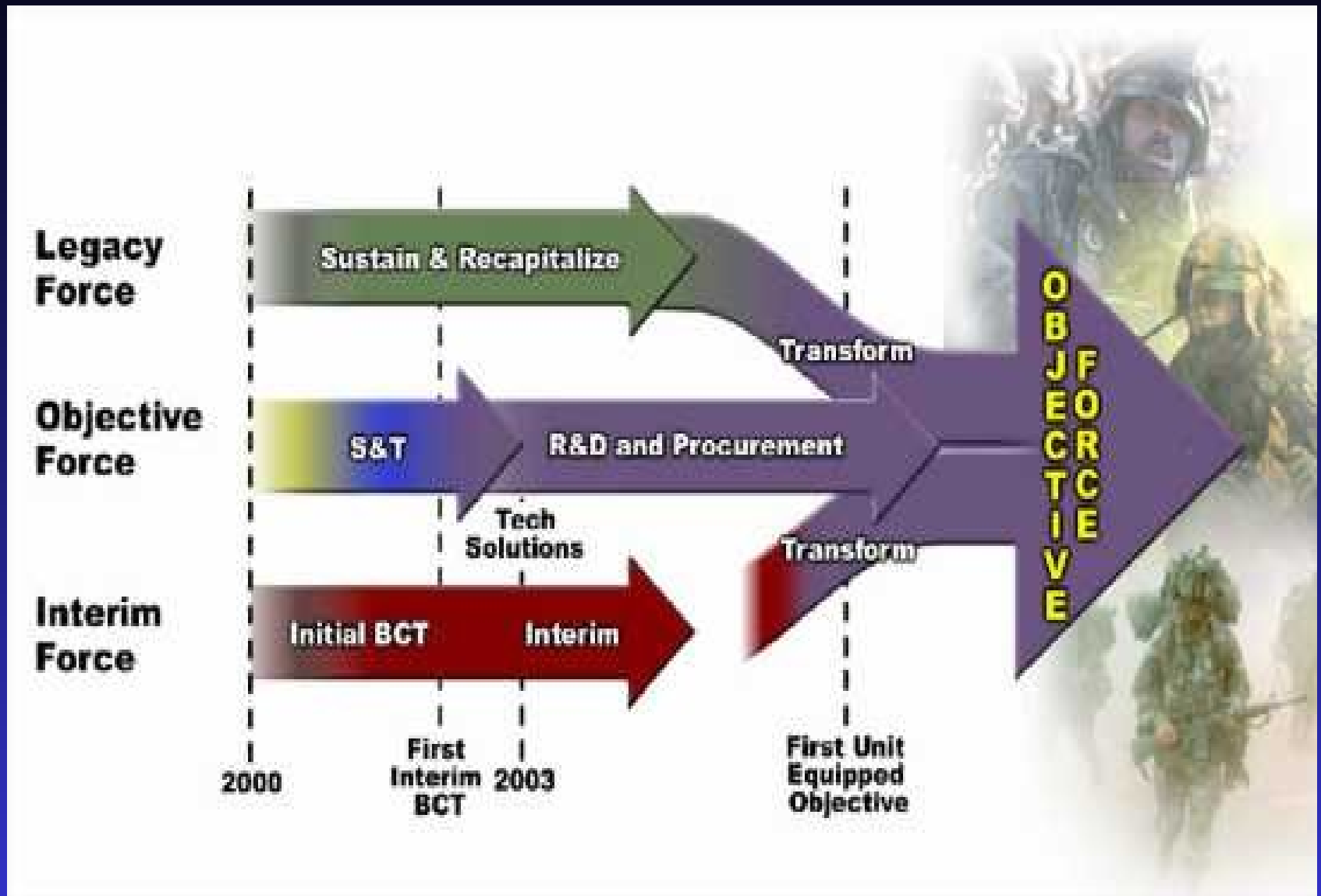
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OUTLINE

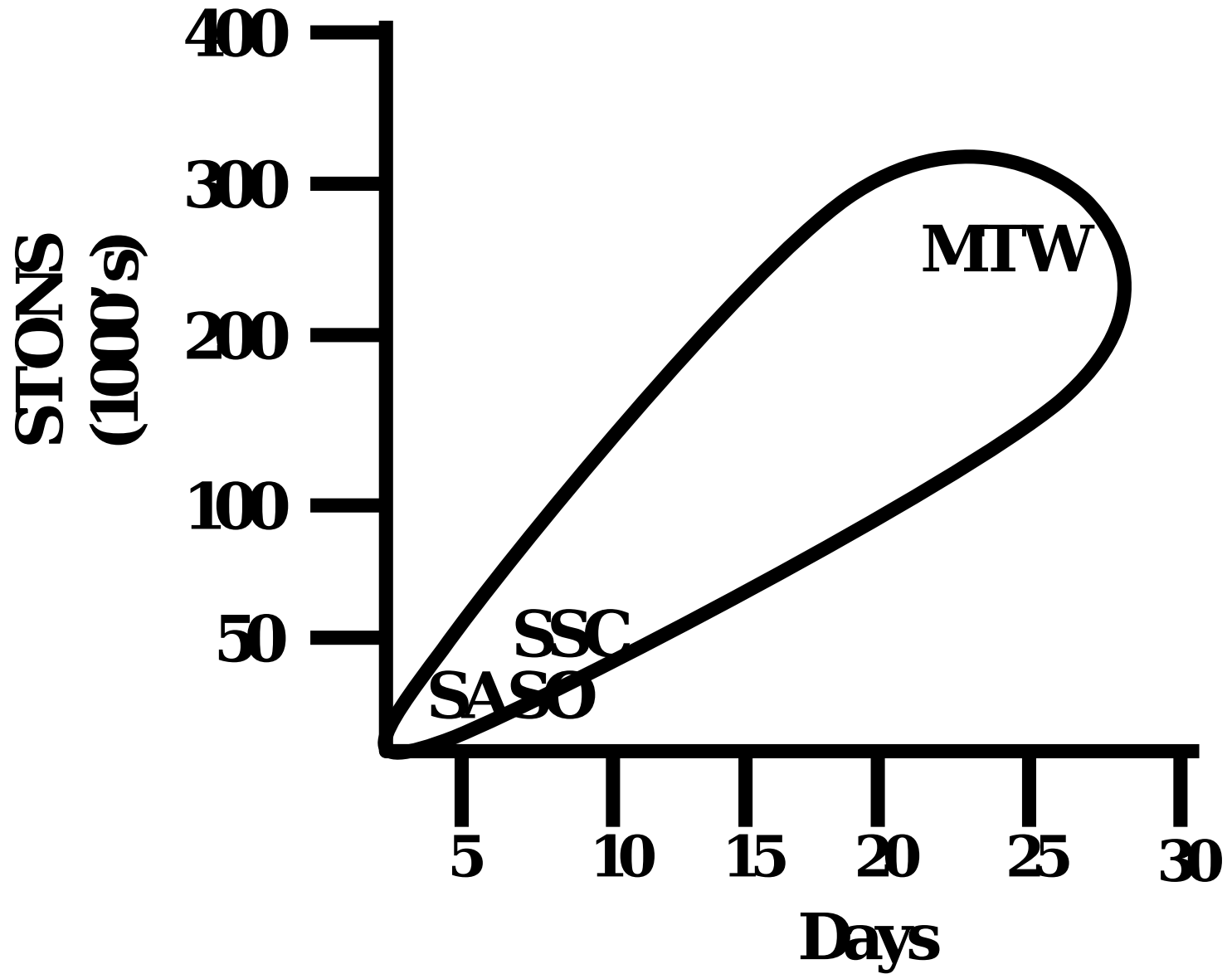
- **Motivation for new approach**
- **Description of new methodology**
- **Assessment of throughput potential**
- **Analysis of “deltas” of new methodology**

Future Army Force Projection

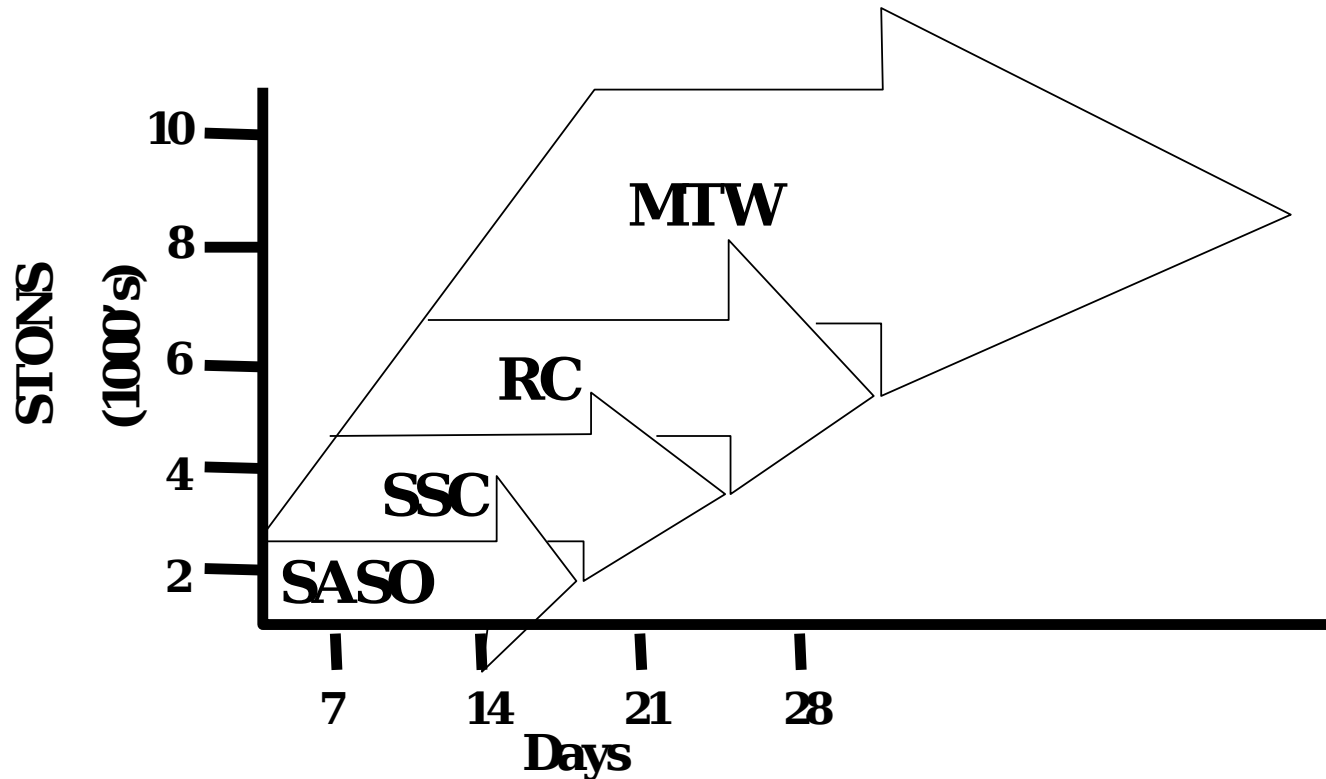


MOTIVATION

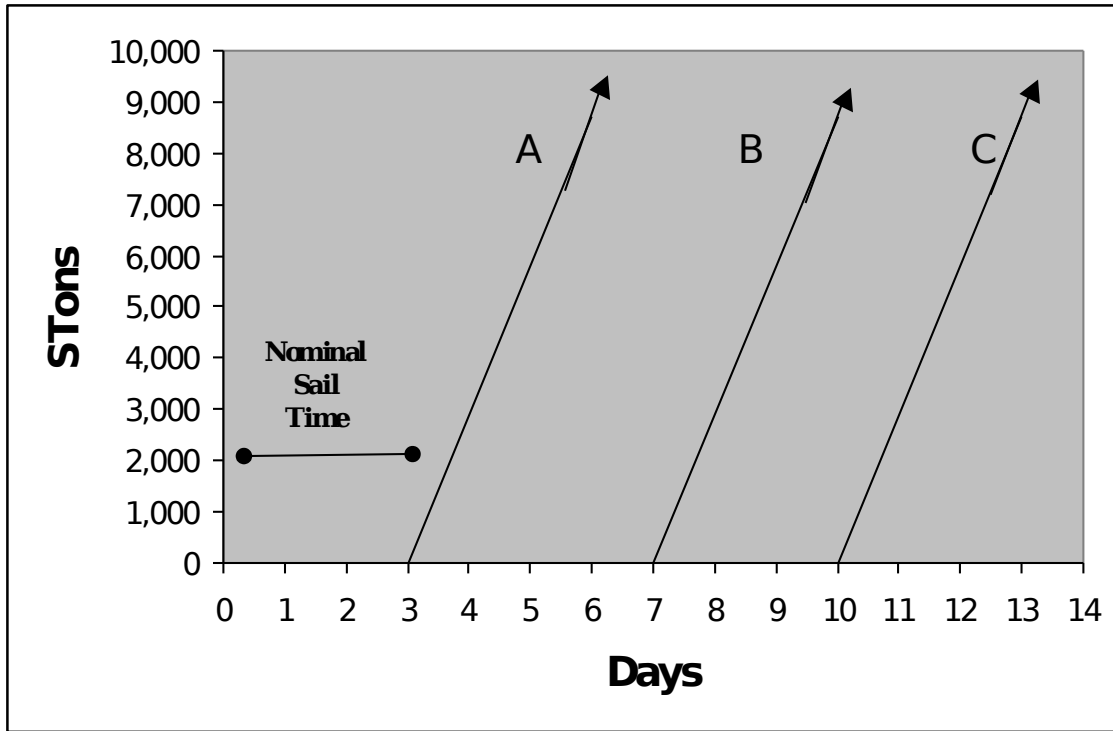
- New Army Vision has raised Force Projection Requirements
 - 1 Brigade 96 hours
 - 1 Division 120 hours
 - 5 Divisions 30 days
- Adequate Port facilities are “unavailable” in most areas of the world



Expected Sustainment Tonnages for Army Operations



Note that the sustainment tonnage rate is comparable to the initial deployment tonnages for RC and MTW (possible x2 factor)



**A - LCU's with
preassembled RRDF's**

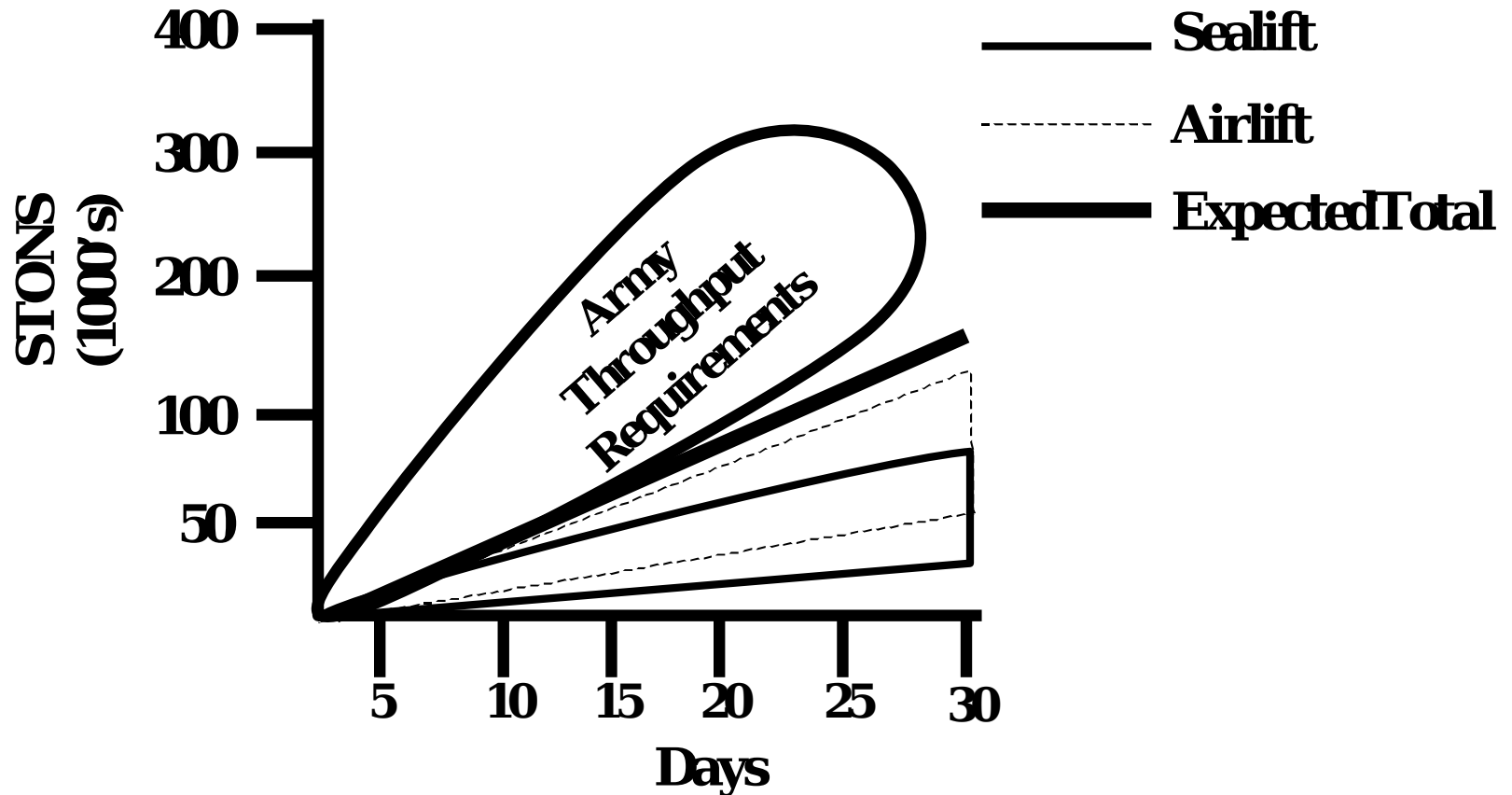
**B - LCU's with
RRDF's assembled
on site**

**C - Causeway ferries and
RRDF's assembled
on site**

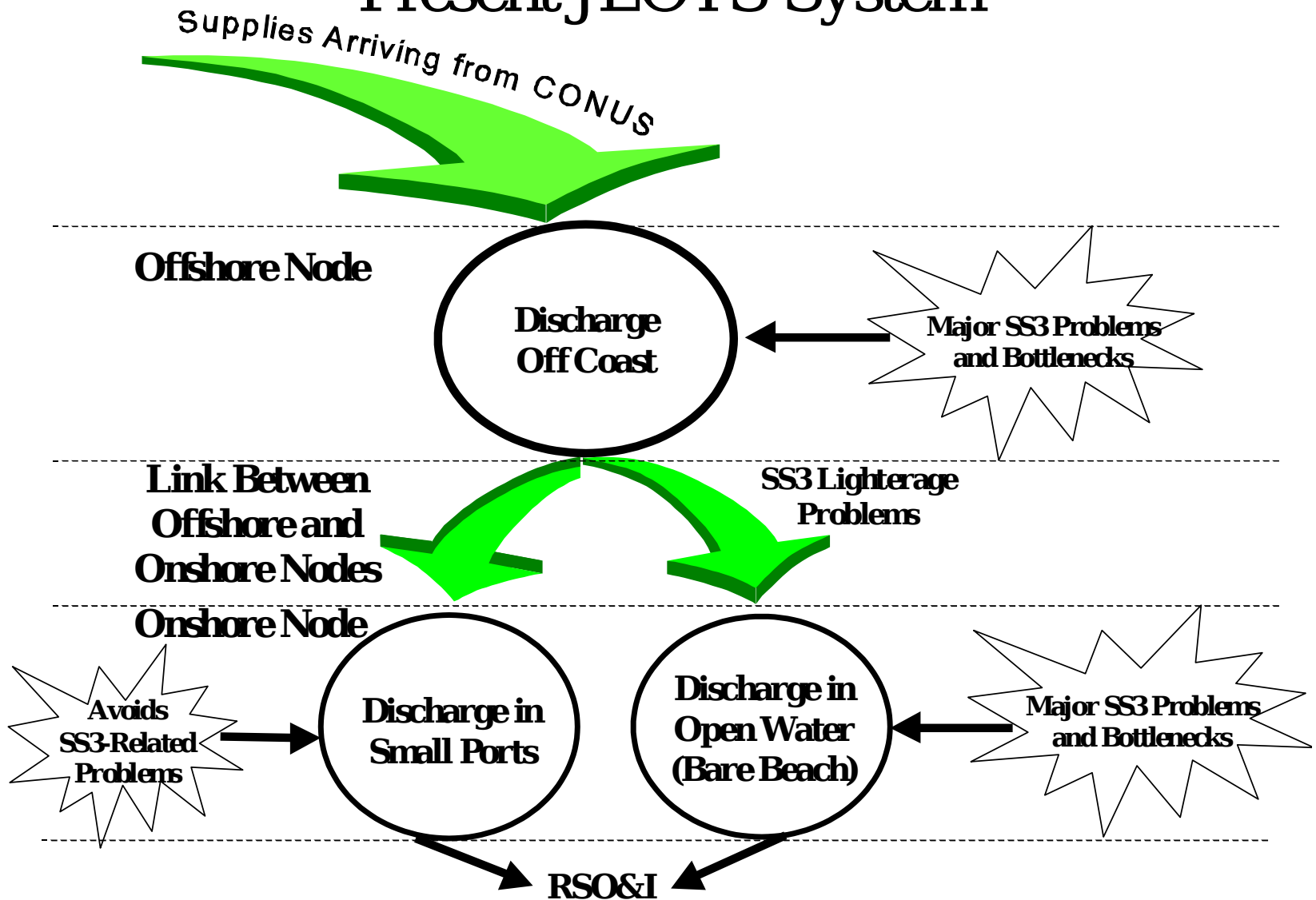
AIRLIFT CAPACITY

- Limited by aircraft
 - Quantity available
 - Capacity
- Limited by airport
 - Quantity available
 - Capacity (MOG)

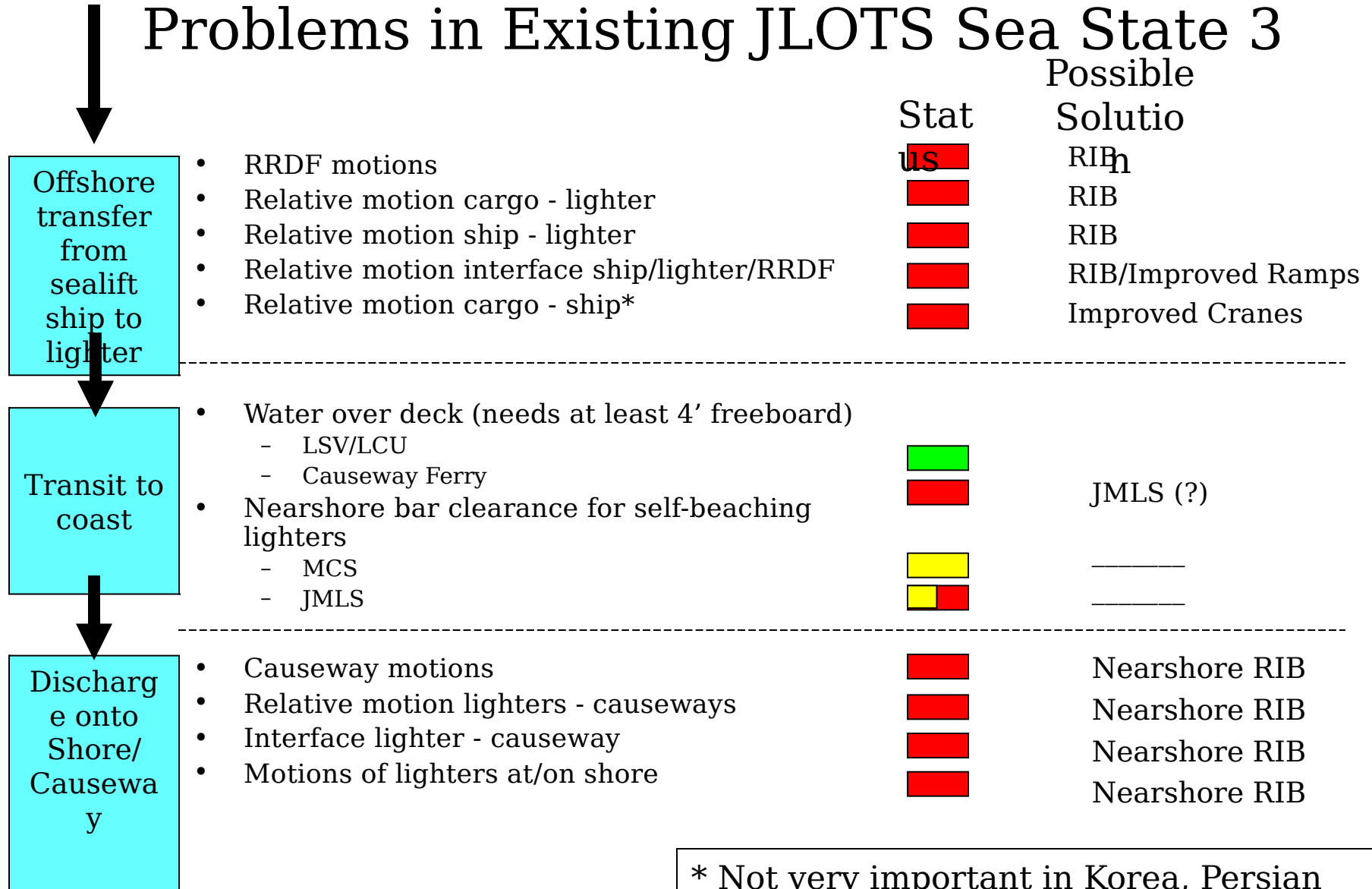
Comparison of Airlift/J LOTS Throughput Rates with Army Requirements



Present JLOTS System



Assessment of Primary Technical Problems in Existing JLOTS Sea State 3

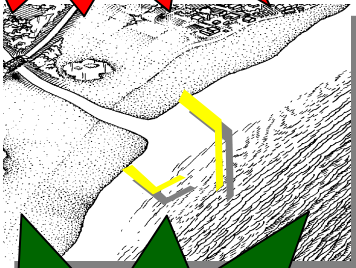


* Not very important in Korea, Persian Gulf, Mogadishu, Mediterranean, Caribbean

Port Operations Rapid Throughput System (PORTOPS)

Project Objective: To demonstrate the capability to rapidly repair/construct port facilities that can accommodate intermediate, very high-speed cargo vessels, providing a fold increase in Force Projection throughput over existing JLOTS capacities.

Lack of port availability is the primary limiter to effective Sealift throughput



Rapid breakwater technology will allow port repair/enhancement/construction in critical theater areas around the globe

Sealift from CONUS

Intermediate Staging Base

JLOTS throughput rates are inadequate to meet future Army Force Projection Requirements



Primary Throughput

Secondary Throughput

Intratheater Movements

Enhanced Small Ports with Mechanized MHE/CHE

Enhanced Connection to Infrastructure

Primary Ops Area

JLOTS Site

JLOTS Site

Secondary Ops Areas

Mechanized MHE/CHE and robust link to infrastructure dramatically increase throughput over manual JLOTS methods

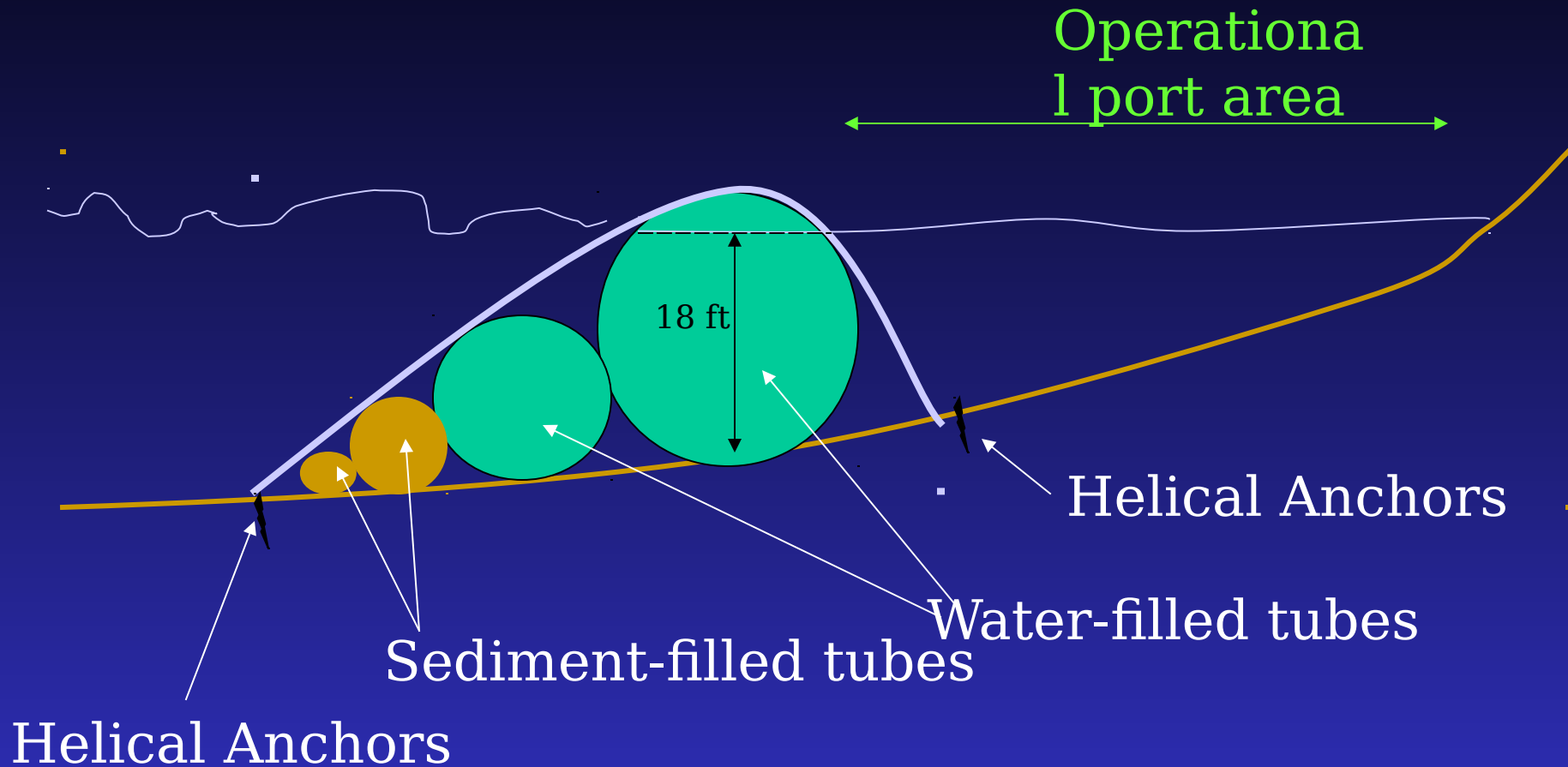
Project the Force

REQUIRED SYSTEM CHARACTERISTICS

- Avoid unprotected open-water operations
- Extend operations through Sea State 4
- Increase speed of discharge at coast
- Entire system functional in 3 days

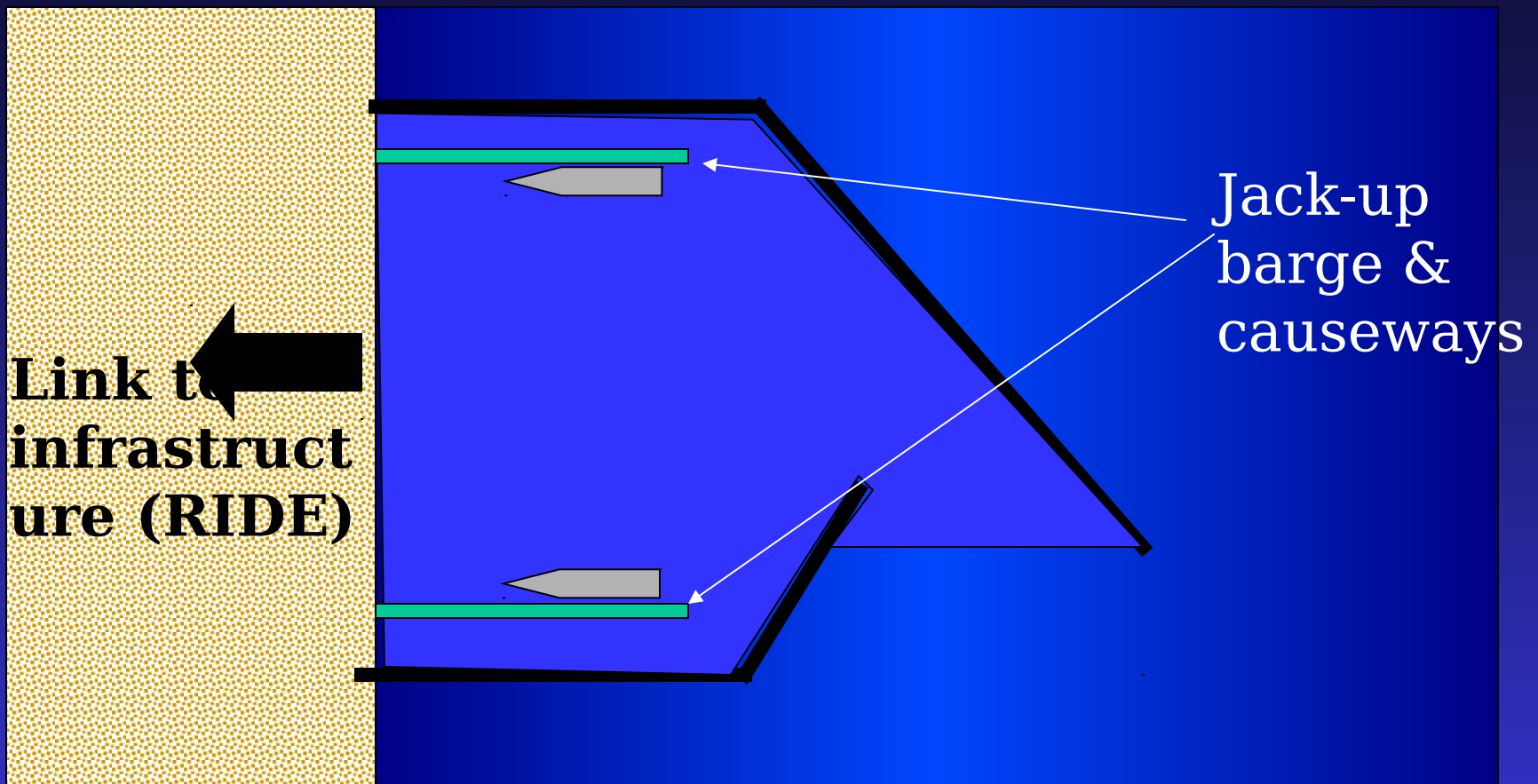
NEARSHORE BREAKWATER SYSTEM

Side View

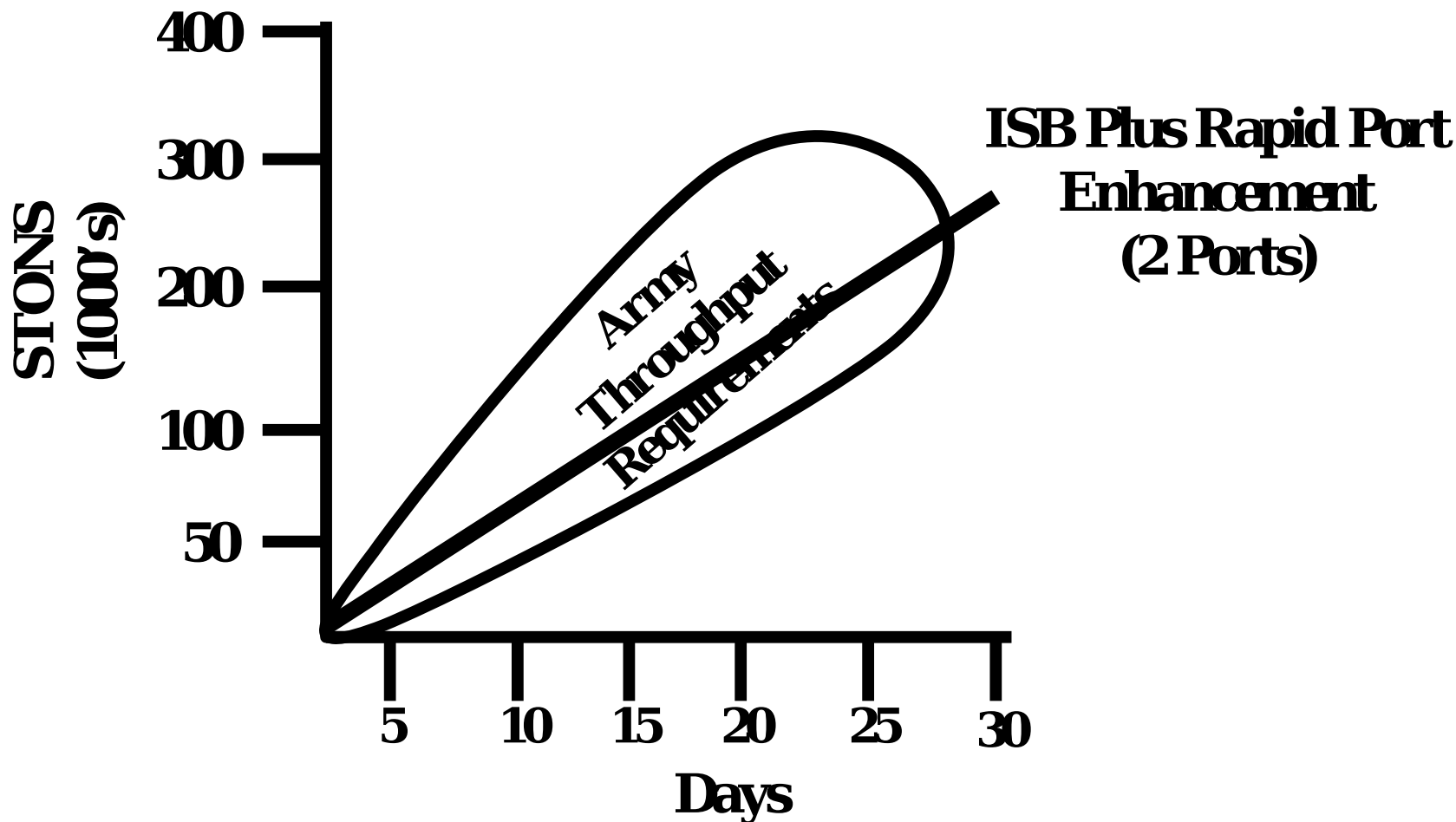


NEARSHORE BREAKWATER SYSTEM

Plan View



Comparison of Airlift/JLOTS Throughput Rates with Army Requirements



PORTS ADVANTAGES

- Can leverage commercial shipping investments
- Builds from RIB technology
- Much more robust since there are no open-water operations
- MHE/CHE can be significantly improved

POTENTIAL PORTS ADVANTAGES (CONT)

- Warfighters arrive ready to fight
 - Large numbers at a single location
 - Personnel and equipment arrive together
- RSO&I is centralized
- Provides JLOTS with technology for Sea-State mitigation at coast
- Fuel and Cost Factors for Sealift will be 1/3 to 1/4 those of Airlift

SUMMARY

- It is highly unlikely that Airlift alone can meet the wide range of Army FP requirements
- Robust Sealift can potentially meet significant portion of the new Army Force Projection Requirements
- Additional Advantages
 - Less expensive
 - Units arrive “ready to fight”
 - RSO&I is less dispersed
 - Nearshore Sea State Mitigation Technology can be used in JLOTS